REMARKS/ARGUMENTS

Claims 1-14 are pending in the application. The Examiner has rejected claims 1-14. Applicant respectfully requests reconsideration of pending claims 1-14.

The Examiner has objected to claims 7 and 11, alleging the "phrase 'so as' in line 2 of claims 7 and 11 are to be deleted to render the claims positive." Applicant respectfully disagrees. Applicant submits the Examiner does not cite any basis in the statutes, rules, case law, or MPEP to support the Examiner's assertion. Moreover, Applicant notes the Examiner has previously examined the present .application and issued two Office actions in which the Examiner did not object to the phrase "so as." In fact, in the Office action having a mail date of 04/12/2007, the Examiner objected to the phrase "configured to" but did not object to the phrase "so as." Furthermore, Applicant notes the Office has issued many patents that recite the phrase "so as" in their claims. Examples of such issued patents include U.S. Patents No. 4,393,488; 5,402,452; 5,410,363; 5,438,537; 5,528,530; 5,703,627; 5,721,757; 5,806,006; 5,956,504; and 6,622,264. Thus, Applicant submits the Examiner's objection to claims 7 and 11 is obviated.

The Examiner has rejected claims 1-4 and 6-13 under 35 U.S.C. § 103(a) as allegedly being anticipated by Kloth, et al. (US 2004/0081108 A1). Applicant respectfully disagrees.

Regarding claim 1, Applicant submits the cited portions of the cited reference fails to anticipate the subject matter of claim 1. As one example, Applicant submits the cited portions of the cited reference fails to disclose "using, by the first line card, a first grant received from the switch fabric permitting transmission of the first unit of the traffic to the switch fabric and issued in response to a second request made for a second unit of the traffic having a second priority lower than the first priority and being destined to the first output port, for scheduling transmission of the first unit of the traffic to the switch fabric." While the Examiner cites "(paragraph 75, lines 7-11 wherein a second request of a lower priority order is sent the first output port)" as allegedly disclosing such feature, Applicant notes "paragraph 75, lines 7-11" merely recites "The second output queue 1304 associated with output port B includes a set of request messages 1312 including three request messages received from the first line card and one request message received from the second line card." Applicant submits such teaching does not disclose "a second request of a lower priority order is sent the first output port," as alleged by the Examiner or, more significantly, ""using, by the first line card, a first

grant received from the switch fabric permitting transmission of the first unit of the traffic to the switch fabric and issued in response to a second request made for a second unit of the traffic having a second priority lower than the first priority and being destined to the first output port, for scheduling transmission of the first unit of the traffic to the switch fabric," as recited in claim 1. Therefore, Applicant submits claim 1 is in condition for allowance.

Regarding claim 2, Applicant submits the cited portions of the cited reference fail to anticipate the subject matter of claim 2. As an example, Applicant submits the cited portions of the cited reference fail to disclose "using a second grant issued in response to the first request for scheduling transmission of the second unit of the traffic to the switch fabric." While the Examiner cites "(paragraph 75, lines 7-11 wherein grants are issued to their corresponding requests)," Applicant submits claim 2 does not recite "wherein grants are issued...," but rather "...using a second grant...for scheduling transmission...." Therefore, Applicant submits claim 2 is in condition for allowance.

Regarding claim 3, Applicant submits the cited portions of the cited reference fail to anticipate the subject matter of claim 3. As an example, Applicant submits the cited portions of the cited reference fail to disclose "wherein the first priority and the second priority are selected from a plurality of priorities corresponding to a respective plurality of service classes." While the Examiner cites "(paragraph 53, lines 5-10 wherein the packets are prioritized based on a plurality of priority levels corresponding to Quality of Service)," Applicant notes "paragraph 53, lines 5-10" states, "Rather than transmitting frames or packets as they are received, they are stored temporarily in a buffer or virtual output queue 518, as described above with reference to FIG. 4. In addition, it may be desirable to temporarily store a packet based upon Quality of Service in one of a set of queues that each correspond to different priority levels." Applicant submits "based upon Quality of Service" appears to modify "packet" or "store a packet," not "one of a set of queues that each correspond to different priority levels" or any portion thereof. Applicant notes *Garner's Modern American Usage* (Oxford University Press, 2003), at page 85, indicates, "*based* [may be] read as a past-participial adjective" or, more informally, as an adverb, where *based* is read as modifying a noun or verb preceding it in the provided examples. Thus, Applicant submits the cited portion of the cited reference fails to disclose, for example, "...a plurality of priorities corresponding to a respective plurality of service classes. Therefore, Applicant submits claim 3 is also in condition for allowance.

Regarding claim 4, Applicant submits the cited portions of the cited reference fail to anticipate the subject matter of claim 4. As an example, Applicant submits the cited portions of the cited

reference fail to disclose "wherein the first line card sends the first request after the second request." While the Examiner cites "(paragraph 83, lines 8-11 wherein the requests may be reordered)," Applicant notes the cited portion of the cited reference states, "However, it should be understood that the invention is not limited to such implementations, but instead would equally apply to packets as well. In addition, it is possible to support intentional re-ordering of packets and/or frames...." Applicant submits claim 4 does not recite "...intentional re-ordering of packets and/or frames...," but rather relates to "the first request" and "the second request." Therefore, Applicant submits claim 4 is in condition for allowance.

Regarding claims 6 and 10, Applicant submits the cited portions of the cited reference fail to anticipate the subject matter of claims 6 and 10. As an example, Applicant submits the cited portions of the cited reference fail to disclose "a first line card of the plurality of line cards, the first line card configured to send requests for transmitting units of the traffic of specified priorities to the switch fabric and to receive grants permitting transmission of the units of the traffic to switch fabric, the first line card further configured to utilize a first grant of the grants corresponding to a first request of the requests, wherein the first request is of a lower priority than a second request of the requests, for transmitting a first unit of the traffic corresponding to the second request to the switch fabric." As another example, Applicant submits the cited portions of the cited reference fail to disclose "a second means configured to utilize a first grant of the grants corresponding to a first request of the requests, wherein the first request is of a lower priority than a second request of the requests, for transmitting a first unit of the traffic corresponding to the second request to the switch fabric." While the Examiner cites "(paragraph 83, lines 8-11 wherein the requests may be reordered)," Applicant notes paragraph 83, lines 11-13 of the cited reference states, "...by attaching a priority to the request, credit, and /or grant messages, which may then be matched with the priority of the packets/frames." Applicant submits such teaching fails to disclose "... configured to utilize a first grant of the grants corresponding to a first request of the requests, wherein the first request is of a lower priority than a second request of the requests, for transmitting a first unit of the traffic corresponding to the second request to the switch fabric." Therefore, Applicant submits claims 6 and 10 are in condition for allowance.

Regarding claims 7 and 11, Applicant submits the cited portions of the cited reference fail to anticipate the subject matter of claims 7 and 11. As an example, Applicant submits the cited portions of the cited reference fail to disclose "...wherein the first line card is further configured to utilize the first grant for transmitting the first unit of the traffic so as to conform to a latency criterion pertaining

to a first data stream comprising the first unit of the traffic." As another example, Applicant submits the cited portions of the cited reference fail to disclose "...wherein the second means is further configured to utilize the first grant for transmitting the first unit of the traffic so as to conform to a latency criterion pertaining to a first data stream comprising the first unit of the traffic." While the Examiner cites "(paragraph 81, lines 4-7 and paragraph 82 wherein the first line card sends the first grant to minimize delay and maximize system throughput)," Applicant notes "paragraph 81, lines 4-7" states, "As a line card receives a grant message, the line card provides the grant message to the appropriate input port at block 1802, as described above. The input port sends one or more packets or frames at block 1804 to the output port." Applicant further notes "paragraph 82" states as follows:

> Through the generation and transmission of a superframe within a switch using an arbitration system, it is possible to maximize the amount of data transmitted by a switch while controlling the congestion at the output ports. Accordingly, the throughput of the switch is maximized while minimizing the time delay imposed by an arbitrator.

Applicant submits the cited portion of the cited reference appears to teach "the throughput of the switch is maximized while minimizing the time delay," "[t]hrough the generation and transmission of a superframe." Applicant submits "the generation and transmission of a superframe" does not disclose "...configured to utilize the first grant for transmitting the first unit of the traffic so as to conform to a latency criterion pertaining to a first data stream comprising the first unit of the traffic." Therefore, Applicant submits claims 7 and 11 are in condition for allowance.

Regarding claims 8 and 12, Applicant submits the cited portions of the cited reference do not anticipate the subject matter of claims 8 and 12. As one example, Applicant submits the cited portions of the cited reference fail to disclose "...wherein the first line card is further configured to utilize a second grant of the grants corresponding to the second request for transmitting a second unit of traffic corresponding to the first request to the switch fabric." As another example, Applicant submits the cited portions of the cited reference fail to disclose "...wherein the second means is further configured to utilize a second grant of the grants corresponding to the second request for transmitting a second unit of traffic corresponding to the first request to the switch fabric." While the Examiner cites "(paragraph 80, lines 10-15)," Applicant notes such portion of the cited reference states as follows:

> Upon receipt of grant messages, the line card may forward the grant messages to the appropriate input ports corresponding to the order in which requests were sent by the line card. In other words, the line card will determine which input port is to receive each grant message and forward the grant message accordingly.

Applicant submits "...the line card may forward the grant message to the appropriate input ports corresponding to the order in which requests were sent by the line card..." fails to disclose "..configured to utilize a second grant of the grants corresponding to the second request for transmitting a second unit of traffic corresponding to the first request to the switch fabric." Therefore, Applicant submits claims 8 and 12 are in condition for allowance.

Regarding claims 9 and 13, Applicant submits the cited portions of the cited reference fail to anticipate the subject matter of claims 9 and 13. As an example, Applicant submits the cited portions of the cited reference fails to disclose "...wherein the first line card is further configured to issue the first request prior to the second request." As another example, Applicant submits the cited portions of the cited reference fail to disclose "...wherein the first means is further configured to issue the first request prior to the second request." While the Examiner cites "(paragraph 79, lines 7-16 wherein the grants may be issued in any order)," Applicant notes the cited portion of the cited reference states as follows:

> In this example, a first grant queue 1602 is associated with the first input line card while a second grant queue 1604 is associated with the second input line card. Grant messages or grant indicators are stored in the queues in the desired order of transmission to the corresponding line card. As shown, each entry in the queue identifies the output port for which the grant message is provided. The grant messages may be sent separately or in a list. For instance, multiple grant messages may be sent in a single frame to the line card.

Applicant submits the Examiner appears to mischaracterize the teachings of the cited portion of the cited reference. Applicant can find no teaching in the cited portion of the cited reference of "wherein the grants may be issued in any order." More significantly, Applicant submits the cited portion of the cited reference fail to disclose "configured to issue the first request prior to the second request." Therefore, Applicant submits claims 9 and 13 are in condition for allowance.

The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kloth, et al. (US 2004/0081108 A1) in view of Angle, et al. (U.S. Patent No. 6,771,596 B1). Applicant respectfully disagrees.

Regarding claim 5, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 5. As one example, Applicant submits the cited portions of the cited reference fail to disclose or suggest "...wherein the first line card sends a first set of requests of a highest priority of a plurality of priorities, with the first set of requests corresponding to a first quantity of the traffic in an amount of guaranteed traffic flow serviced by the first line card, and sends a second

set of requests of a lower priority of the priorities for a second quantity of the traffic." Applicant notes the Examiner alleges "Angle, from the same or similar field of endeavor, teaches sending a plurality of requests with different priority levels, wherein the requests with the highest priority are first presented followed by the requests with lower priority (column 16, lines 10-20)." Applicant submits the Examiner fails to allege any teaching in either reference or combination thereof as to, for example, "...in an amount of guaranteed traffic flow serviced by the first line card...." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 5. Also, Applicant submits the Examiner alleges as purported motivation to combine "to reduce the latency in the network." However, Applicant submits the Examiner does not show how the Examiner's alleged combination of the references would serve "to reduce the latency in the network." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 5. Therefore, Applicant submits claim 5 is in condition for allowance.

The Examiner has rejected claim 14 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kloth, et al. (US 2004/0081108 A1) in view of Kawarai, et al. (U.S. Patent No. 7,058,751 B2). Applicant respectfully disagrees.

Regarding claim 14, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 14. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest "...wherein the using, by the first line card, the first grant comprises: performing grant substitution." While the Examiner alleges "Kawarai, from the same or similar field of endeavor, teaches scheduling packets of highest priority level with lowest priority and scheduling packets of lowest priority level with highest priority (column 9, lines 22-31)." Applicant notes the cited portion of the cited reference states as follows:

> When the selecting process is completed on all input lines, affirmative determination is made in step S100, and then each of the scheduler process sections #1 through #N moves the position of the round-robin pointer such that the priority order of the input line currently having the highest order can have the lowest order next time (step S104). In examples shown in FIGS. 7A through 7C, since the highest priority level is currently assigned to the input line #1, the position of the round-robin pointer is set so that the priority level of the next input line #2 can be the highest and the priority level of the input line #1 can be the lowest as showing in FIG. 7D.

Applicant submits the Examiner has mischaracterized the teachings of the cited reference Applicant notes the Examiner alleges the cited portion of the cited reference "teaches scheduling packets of highest priority level with lowest priority and scheduling packets of lowest priority level with highest priority." However, Applicant notes the cited portion of the cited reference discloses "...the input line

currently having the highest order can have the lowest order next time...." Moreover, Applicant submits the cited portion of the cited reference does not disclose or suggest, nor does the Examiner allege it to disclose or suggest, "performing grant substitution." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect the subject matter of claim 14. While the Examiner states, in the Examiner's Response to Arguments, "...one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references," Applicant notes the Examiner acknowledges the Kloth reference does not disclose performing grant substitution." As Applicant submits the Examiner acknowledges the Kloth reference does not disclose grant substitution and does not allege that the Kawarai reference either discloses or suggests "performing grant substitution," Applicant submits the Examiner has not established any basis for concluding that any combination of the cited references could possibly render obvious the subject matter of claim 14. Also, Applicant submits the Examiner alleges as purported motivation to combine "to reduce delay in the network." However, Applicant submits the Examiner does not show how the Examiner's alleged combination of the references would serve "to reduce delay in the network." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 14. Therefore, Applicant submits claim 14 is in condition for allowance.

In conclusion, Applicant has overcome all of the Office's rejections, and early notice of allowance to this effect is earnestly solicited. If, for any reason, the Office is unable to allow the Application on the next Office Action, and believes a telephone interview would be helpful, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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Date

Ross D. Snyder, Reg. No. 37,730
Attorney for Applicant(s)
Ross D. Snyder & Associates, Inc.
PO Box 164075
Austin, Texas 78716-4075
(512) 347-9223 (phone)
(512) 347-9224 (fax)